

A stylized, colorful illustration of a landscape. In the foreground, there are rolling green hills with a dark brown path. On the left, a green tree and a purple flower stand on a hill. A small red bird is flying in the sky. The background features wavy blue and white lines representing a sky or water.

Multi-Drug Resistant Organisms

Protecting yourself and those around you.

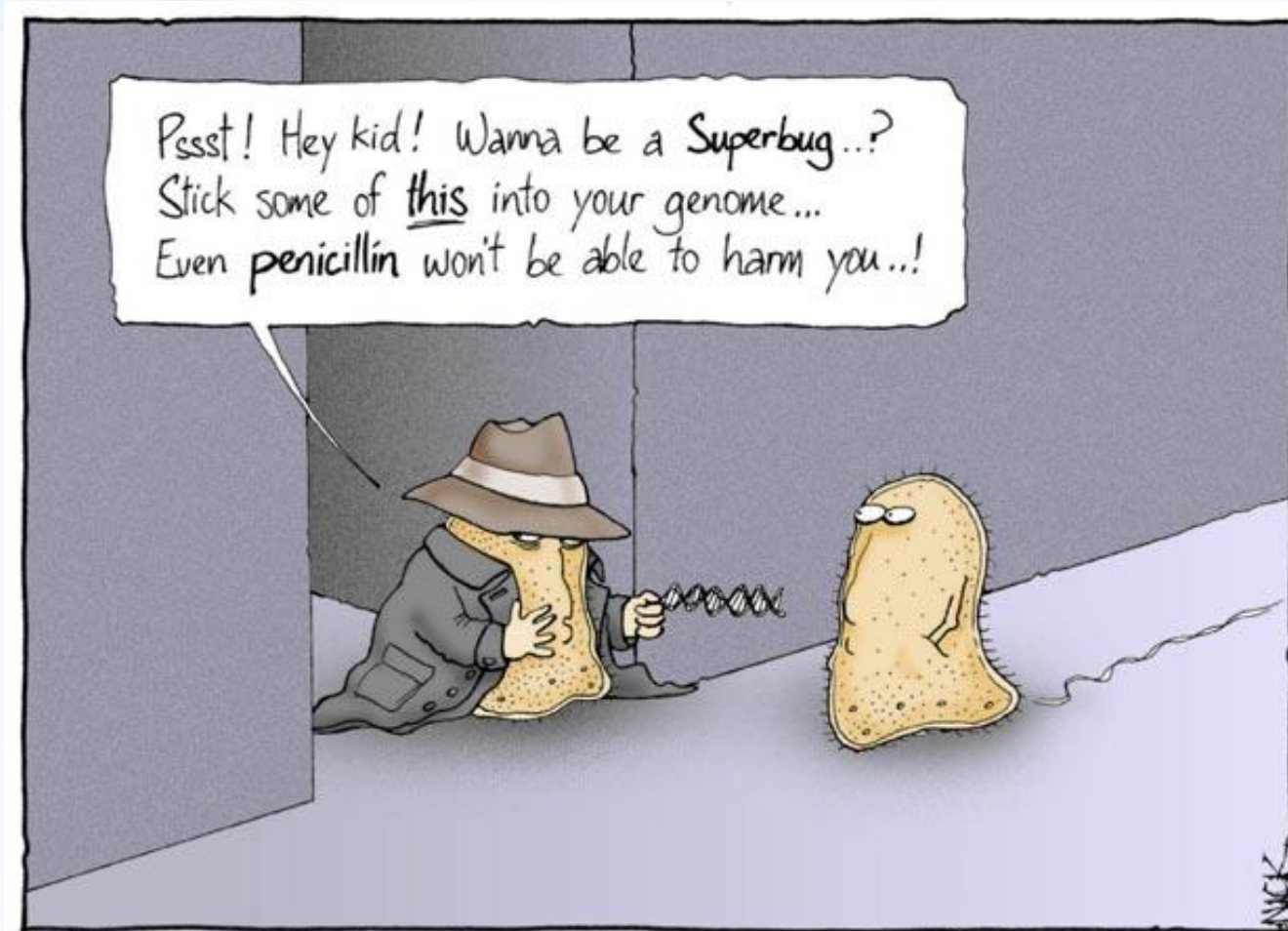
McHenry County Department of Health, CD Program
March 19th, 2013

MDROs: The Basics

- What are MDROs?
- How are they spread?
- How can I protect myself and others?
- Hand Washing
- Personal Protective Equipment
- Pass it on



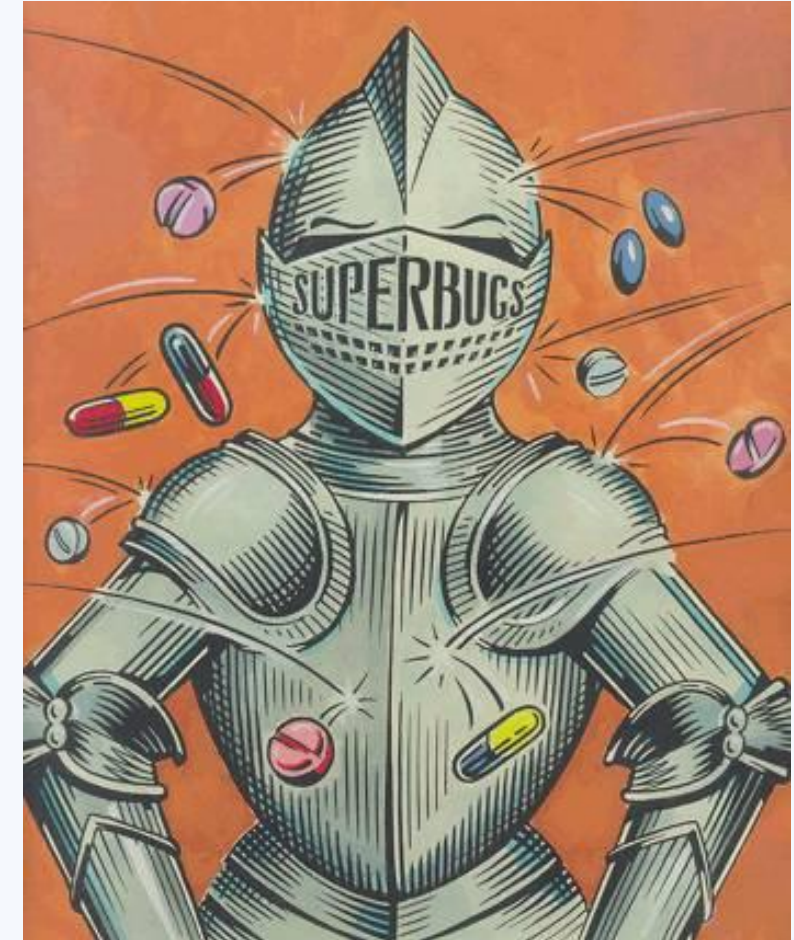
What is a Multi-Drug Resistant Organism?



It was on a short-cut through the hospital kitchens that Albert was first approached by a member of the Antibiotic Resistance.

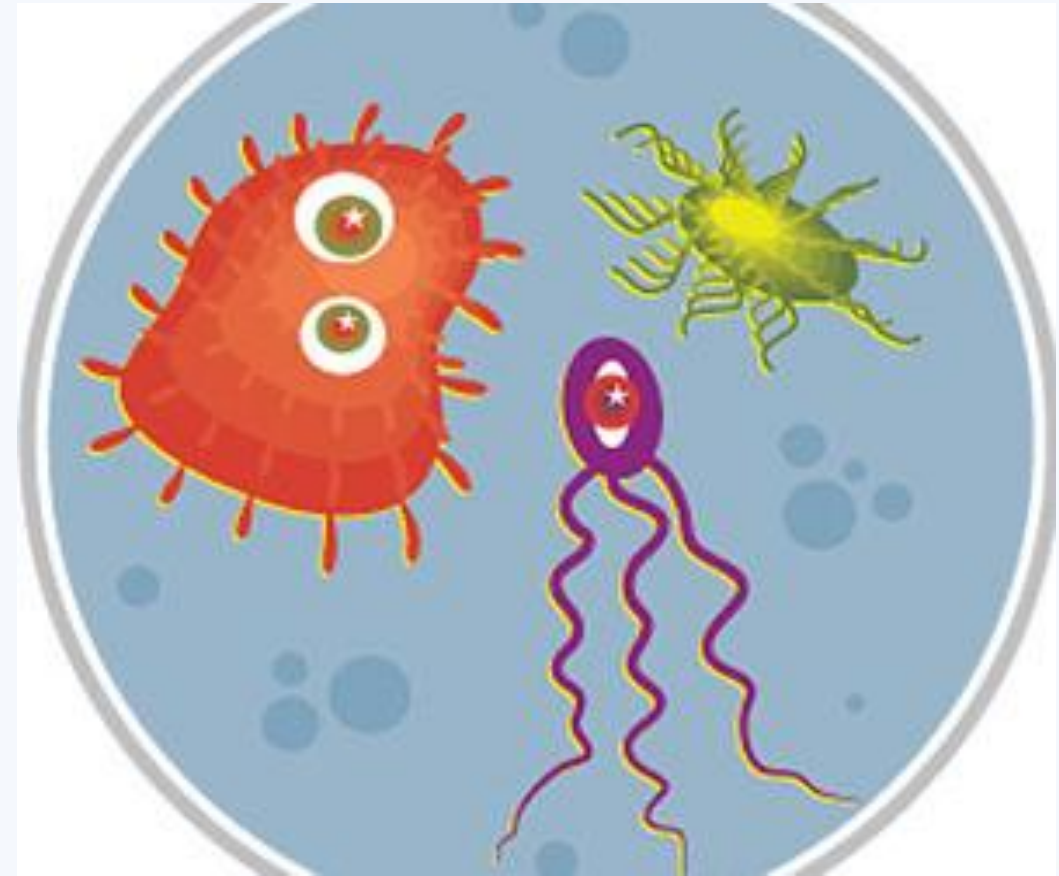
What are Multi-Drug Resistant Organisms (MDROs)?

- MDROs are usually bacteria that have become resistant to the medicines (antibiotics) used to treat them. This means that a particular medicine is no longer able to kill or control the bacteria.
- The more often the antibiotics are used, the more likely it is that resistant bacteria will develop. The MDROs can then go on to infect people.
- Some common MDROs include: MRSA, VRE, ESBL & CRE



Will I get sick if I am exposed to a MDRO?

- In some cases, it is possible for the MDRO to be present on your body but not cause any illness.
- Such cases are called “colonization”. Bacteria can colonize in various areas of the body including the skin and in the nose.
- Colonization rarely becomes an infection unless the bacteria spread to a different and susceptible part of the body.



Who is at risk?

- If you are sick, you are considered to be “infected”.
- Infection means that bacteria are present in or on your body and causing an illness or other medical condition.
- Infection with a MDRO occurs most often in young children, the elderly, or in people who have an existing severe illness or a health condition.
- **Remember, healthy people are at low risk of infection. But you can still spread the bug!**



The A, B, C, D, E & V's of how Germs are Spread.

- Most often, MDROs are spread through contact either direct or indirect on objects such as handles, bed rails, bedside tables or through direct contact with the infected person or bodily fluid.
- Person-to-Person contact will also spread illness if precautions are not taken.

A: Airborne

D: Droplet

B: Blood or
Bodily Fluid

E: Enteric
(Fecal-Oral)

C: Contact

Vehicles
and Vectors



Protect what's important

Steps you can take to prevent the spread of MDROs.

Spread the Love not the Germs

Wear Personal Protective Equipment (PPE) & Wash hands OFTEN!



- Be proactive! Assume all bodily fluids are infected.
- Wash your hands between patients
- Keep gloved hands away from face
- Remove gloves if torn; perform hand hygiene before donning new gloves



Standard Precautions

What PPE should I use and when?



Gown: Wear with activities where exposed skin may come in contact with blood or body fluids. (Incontinence Care)



Mask/Goggles: Wear with activities likely to splash or spray of blood or body fluids. (Emptying Foley).



Gloves: Wear when touching blood, body fluids, contaminated items and non-intact skin.

Steps to removing PPE

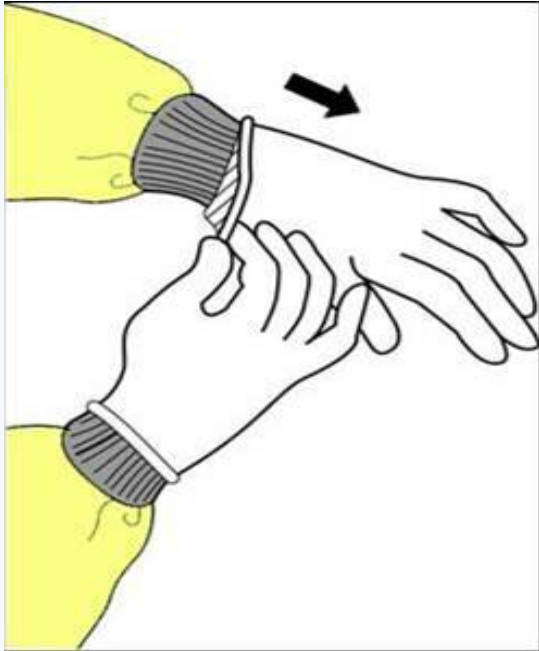
1. Gloves
2. Face shield or goggles
3. Gown
4. Mask or respirator

For reference go to the CDC website at www.cdc.gov

Removing Mask, gloves, and gown

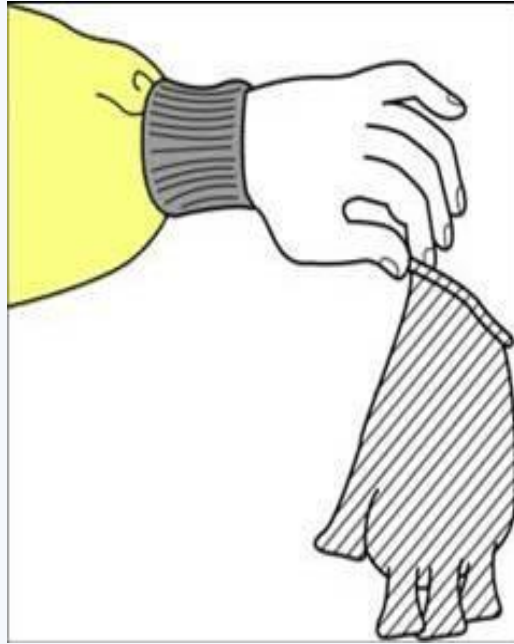


How to remove gloves (1)



1. Grasp outside edge near wrist
2. Peel away from hand, turning glove inside-out
3. Hold in opposite gloved hand

How to remove gloves (2)



4. Slide ungloved finger under wrist of the remaining glove

5. Peel off from inside, creating a bag for both gloves

6. Discard

Let's give everyone a [clean] hand

The CDC says that **keeping your hands clean**
is one of the most effective things you can do
to prevent the spread of diseases

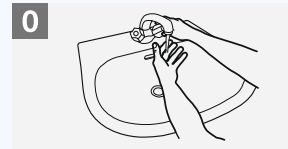
Yale EMERGENCY MANAGEMENT
<http://www.yale.edu/secretary/emergency/index.html>



How to Handwash?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

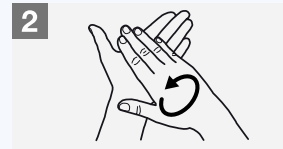
 **Duration of the entire procedure: 40-60 seconds**



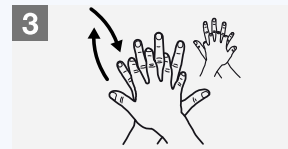
Wet hands with water;



Apply enough soap to cover all hand surfaces;



Rub hands palm to palm;



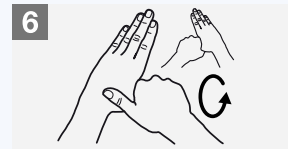
Right palm over left dorsum with interlaced fingers and vice versa;



Palm to palm with fingers interlaced;



Backs of fingers to opposing palms with fingers interlocked;



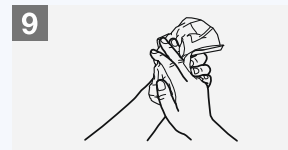
Rotational rubbing of left thumb clasped in right palm and vice versa;



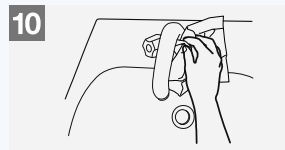
Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



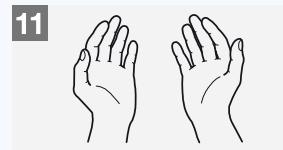
Rinse hands with water;



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



Your hands are now safe.

Steps to Proper Hand washing



World Health
Organization

Patient Safety

A World Alliance for Safer Health Care

SAVE LIVES
Clean Your Hands

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May 2009

Wash Hands with Soap and Water...

- Before, during, and after preparing food
- Before eating food
- Before and after caring for someone who is sick
- Before and after treating a cut or wound
- After using the toilet
- After changing diapers or cleaning up a child or adult who has used the toilet
- After blowing your nose, coughing, or sneezing
- After touching an animal or animal waste
- After handling pet food or pet treats
- After touching garbage

A stylized, colorful illustration of a landscape. The foreground features rolling green hills with a dark brown path. On the left, there is a green tree, a purple flower, and an orange flower. A small red bird is flying in the sky. The background consists of layered blue and white hills under a blue sky.

Between those occasions


You can use Alcohol Based Hand Gels

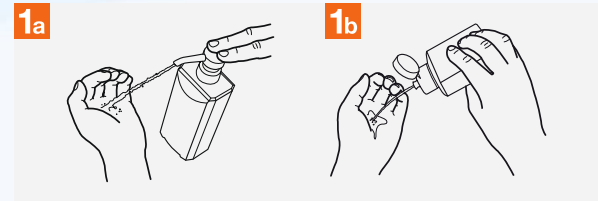
Alcohol Gel vs. Hand Washing

- Washing hands with soap and water is the best way to reduce the number of germs on them.
- If soap and water are not available, use an alcohol-based hand sanitizer that contains at least 60% alcohol.
- Alcohol-based hand sanitizers can quickly reduce the number of germs on hands in some situations, but sanitizers do **not** eliminate all types of germs.
- Hand gels are quick and effective but should not replace hand washing.

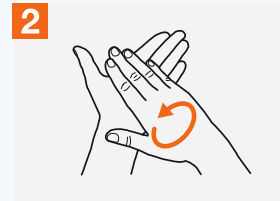
How to Handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

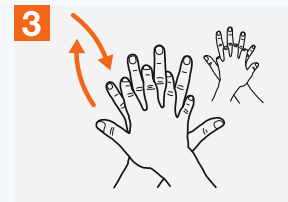
 Duration of the entire procedure: 20-30 seconds



Apply a palmful of the product in a cupped hand, covering all surfaces;



Rub hands palm to palm;



Right palm over left dorsum with interlaced fingers and vice versa;



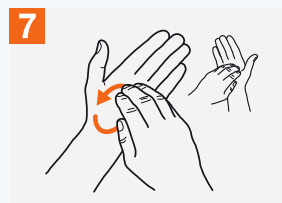
Palm to palm with fingers interlaced;



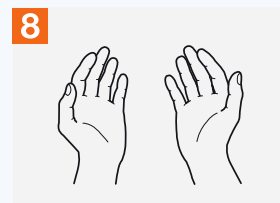
Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



Once dry, your hands are safe.

If you must Gel-Do it Right!

Steps to Using Hand Gels and Rubs



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Questions?

CD Program

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